



EGYPT

AGA/AOP PRIORITIES & CHALLENGES

Third Meeting of the Aerodromes Safety, Planning and Implementation Group

ASPIG/3 Meeting (25-27 October 2021)

Presented by:

Egyptian civil aviation authority

Cairo airport company

Egyptian airport company



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- **Aerodromes Certification Implementation**
 - Before Aerodrome Certification
 - After Aerodrome Certification
- **Runway safety teams Implementation.**
- **Global reporting format Implementation.**
- **ACDM Implementation.**
- **Air Navigation Deficiencies AOP – Area MANDD (<https://mandd.icao.int>)satisfaction.**
- **State's Needs on capacity building.**

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Aerodromes Certification Implementation



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Challenges & Priorities Before Aerodrome Certification



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Before Aerodrome Certification :

Priorities

- The Airport operators need to comply with the relevant ICAO SARPs and applicable national regulations

Challenges

- Many of Non-compliances was found such as runway strips, Runway end safety areas, Taxiway, signs, Markings, old Markings etc.
- Non-compliance exists due to :
 - Lack of training
 - Insufficient maintenance programs

Aerodromes Certification Implementation (CAIRO AIRPORT)

Before Aerodrome Certification :



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- Training done for all participants from the Operations and Engineering and safety sectors
- identify and register non-conformities
- Corrective action done (ACTION PLAN) within an acceptable timeframe



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Challenges & Priorities After Aerodrome Certification



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Egyptian Civil Aviation Authority

After Aerodrome Certification :

Priorities

- The Airport operators need to Maintaining and renewing the certification



Challenges

Obstacles

- Using cranes for New building or redevelop a structure near the airport



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After Aerodrome Certification :

Challenges

Obstacles

- Ex. Construction of a underground station in the final area of the RWY 23R threshold
- 1- Operational restrictions for RWY 05L/23R

Cairo INTL AP (HECA)

Till 2109010800EST, RWY 05L CLSD. RWY 23R used for DEP only.

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After Aerodrome Certification :

Challenges

Obstacles

- 2- Increase movements on the other RWYs
- 3- Inability to implement runway maintenance programs in its time



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After Aerodrome Certification :

Challenges

Obstacles

- 4- Rubber accumulating on the runway 05C threshold

Cairo INTL AP (HECA)

Till 2109150800EST, THR RWY 05C may be slippery when wet, TFC to FLW
TWR instructions.

Aerodromes Certification Implementation



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Challenges

- **Maintain the Training Capacity, and sufficient human resources**
- **Maintain the maintenance of the infrastructure and equipment**
- **COVID 19 Vs Funds are very limited; High Costs & Limited Airports Resources**
- **Infrastructure deficiencies; Annual budgetary system for maintaining and sustaining aerodrome facilities**
- **Work on progress during operation**
- **Lack of provision of adequate funding in addressing and resolving issues of deficiencies arising from the inspections and audits of the aerodromes**

Aerodromes Certification Implementation (EAC)



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Runway safety teams Implementation (Cairo international airport)





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Cairo International Airport

- CAC RST was Established in September 2015 .
- CAC RST comprises Representatives from :-
 - Airport Authority .
 - Pertinent Stakeholders .

Runway safety teams Implementation



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- **CAC Runway Safety Team Aims At :**
 - **Improving Runway Safety Data Collection , Analysis and Dissemination ;**
 - **Maintaining Signage and Markings are ECARs-Compliant and Visible to Pilots and Airside Drivers .**

Runway safety teams Implementation



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- **CAC Runway Safety Team Aims At : cont.**
 - Ensuring that Runways Operation Procedures are Compliant with ECARs Standards ;
 - Analyzing & Evaluating any Accidents / Incidents related to Runway operations (Incursions – Excursions – Wildlife – Laser... etc.) and propose corrective actions and pertinent defenses .

Runway safety teams Implementation



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Priorities

- **Policy Of CAC RST**
 - Transparency .
 - Non Punitive Principal .
 - Team Working .
 - Information Sharing .

Challenges

- Building and Maintaining a common understanding approach among RST members .
- Maintaining formal and voluntary reporting channels among the involved entities .
- Maintaining meeting frequency during the prevailing global health problems .

Runway safety teams Implementation



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Runway safety teams Implementation in Other international Airports





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Priorities

- Safety awareness is implemented Periodically.
- Coordination between all services providers SMS.
- Continued promotion of the establishment of RSTs at each airport
- Establishing effective reporting systems, for sharing information of hazards
- Exchanging information and best practices
- Establish a system to allow a free flow of feedback from line pilots

Challenges

- Coordination: Lots of different organizations to coordinate.
- Workload: All organizations are busy.
- Frequent changes to the composition of the team;
- Challenges with effective documentation of safety information;
- Team building challenges

Runway safety teams Implementation (EAC)



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Global reporting format Implementation





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Priorities

- ▶ Training for aerodrome stakeholders was conducted via ICAO/ACI training online
- ▶ Initial implementation plan has been developed.
- ▶ Coordination with airport runway safety team.

Challenges

- ▶ Implementation by multiple stakeholders.
- ▶ Simple concept but complex implementation.
- ▶ Assessment of a change – human brain is not always trust worth.
- ▶ Time needed to perform measures
- ▶ Interfering with operations on active RWY
- ▶ Resourcing is a real issue: finding enough skilled personnel.

GLOBAL REPORTING FORMAT IMPLEMENTATION (EAC)



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ECAA
Egyptian Civil Aviation Authority

Cairo international airport



GLOBAL REPORTING FORMAT IMPLEMENTATION



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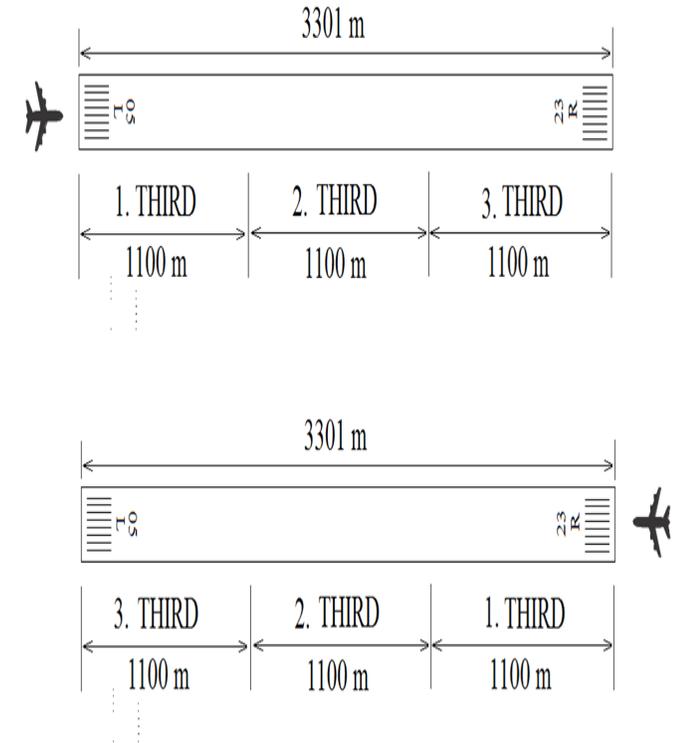
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ECAA
الهيئة العامة للطيران المدني المصري
Egyptian Civil Aviation Authority

Priorities

- Initial training of for the airport's operations and engineering sector trainers was conducted online
- An implementation plan has been developed
- Coordination with the runway safety team
- On-the-Job Training (OJT) for all implementation participants from the Operations and Engineering sector



Global reporting format Implementation



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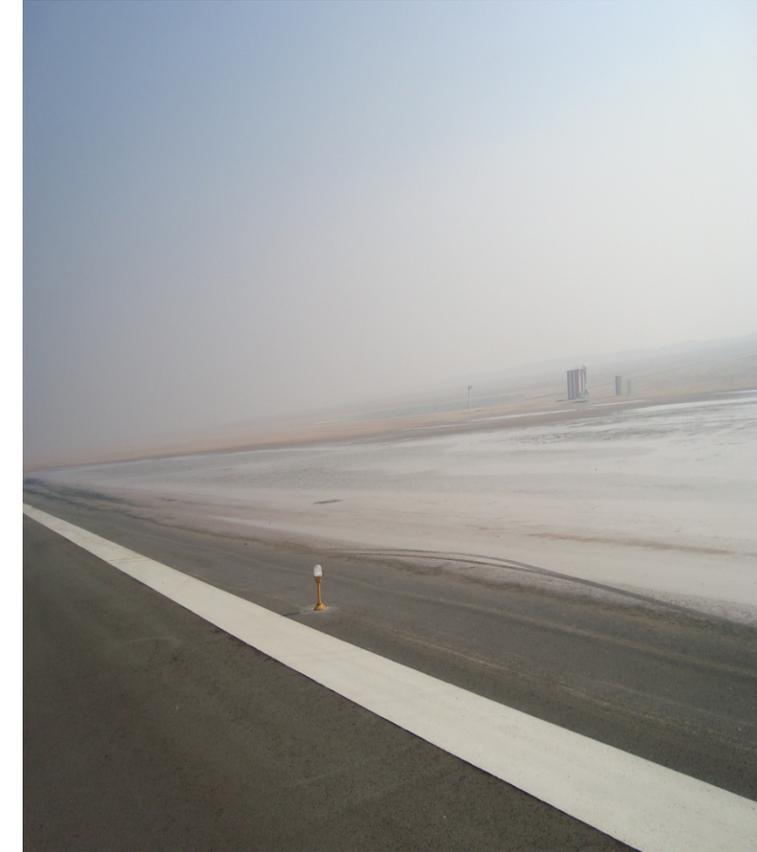


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Challenges

- AIS does-not have a Snow tam system until now
- Due to the good weather and the lack of rain throughout the year at Cairo Airport, the global reporting format will be activated within a few days of each year in the winter season Which requires retraining (OJT) for all implementers to remind them of all procedure annually before winter



Global reporting format Implementation



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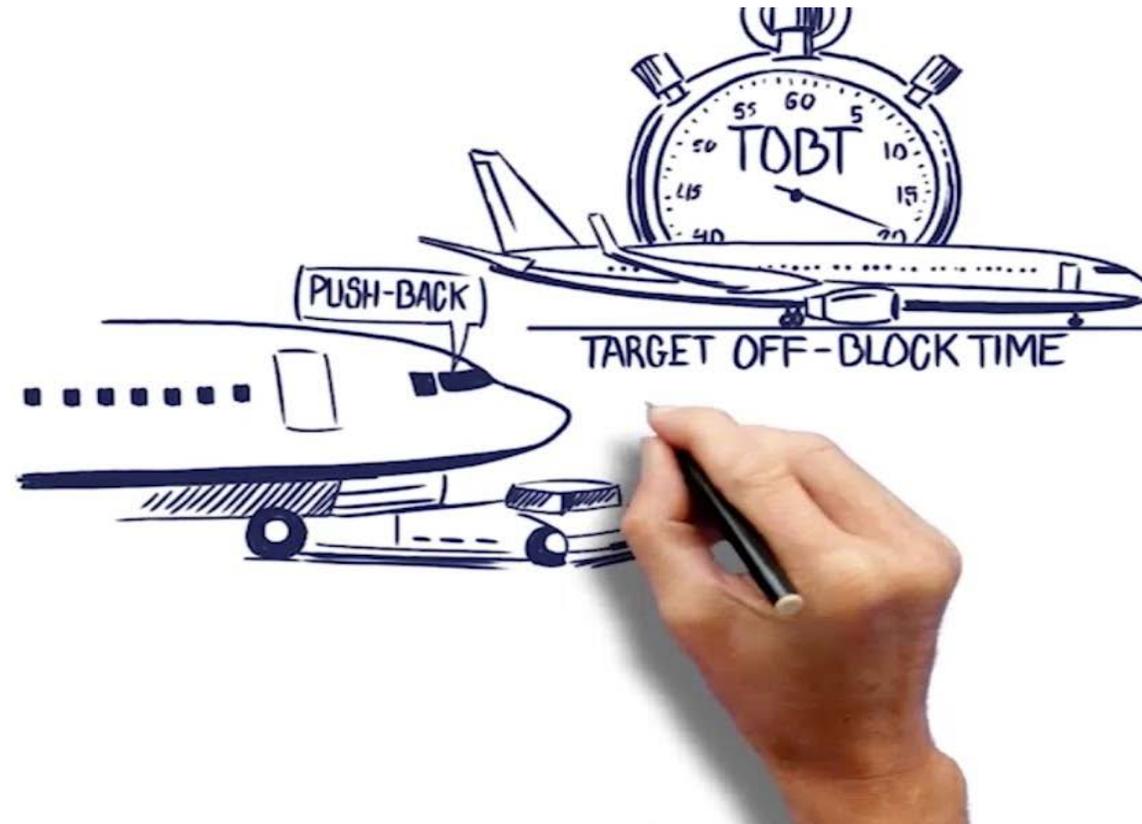
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ACDM Implementation

(CAIRO INTERNATIONAL AIRPORT)





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Priorities

- **Cairo International Airport has developed an Airport Collaborative Decision Making (A- CDM) group, which include (Airport operator, Airline operators, Ground Handlers, Air Navigation Service Provider, Network operations, ARFF, Terminal operator etc.) to implement the project at Cairo Airport, Egypt**
- **We sharing information about 13 Milestones from 16 Milestones (based on the Eurocontrol model)**

ACDM Implementation (CAIRO AIRPORT)



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- the performance of Air Navigation Services (ANS) in 7 Egyptian International Airports (HECA, HESH, HEGN, HELX, HESN, HEBA and HEMA) for two months (June and July 2021) for four key performance indicators.
- 1- KPI 01 Departure Punctuality
- 2- KPI 02 Taxi-out Additional Time
- 3- KPI 13 Taxi-in Additional Time
- 4- KPI 14 Arrival Punctuality

ACDM Implementation (CAIRO AIRPORT)



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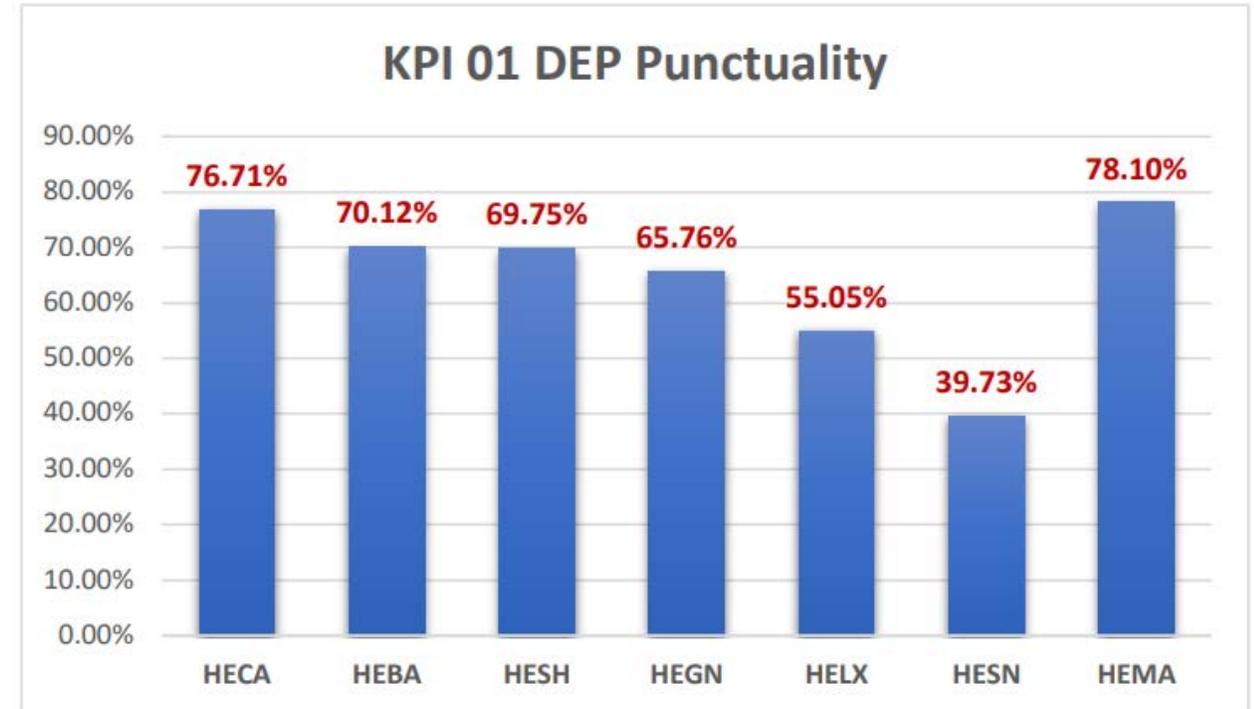
| Eurocontrol Milestones | Applied |
|---|---------|
| Milestone 1 - ATC Flight Plan Activated | √ |
| Milestone 2 - CTOT Allocation/EOBT – 2 Hrs | |
| Milestone 3 - Take off from Outstation | √ |
| Milestone 4 - Local Radar Update/FIR Entry | √ |
| Milestone 5 - Final Approach | √ |
| Milestone 6 - Landed | √ |
| Milestone 7 - In Block | √ |
| Milestone 8 - Aircraft at Gate | √ |
| Milestone 9 - TOBT Entered | |
| Milestone 10 - TSAT Issued | |
| Milestone 11 - Boarding Starts | √ |
| Milestone 12 - Aircraft Ready | √ |
| Milestone 13 - Start-up Request | √ |
| Milestone 14 - Start-up Approved | √ |
| Milestone 15 - Off Block | √ |
| Milestone 16 - Take Off | √ |

ACDM Implementation (CAIRO AIRPORT)



KPI 01 Departure Punctuality

| KPI 01 | Number of scheduled departing flights | DEP Punctuality |
|--------|---------------------------------------|-----------------|
| HECA | 4011 | 76.71% |
| HEBA | 415 | 70.12% |
| HESH | 767 | 69.75% |
| HEGN | 996 | 65.76% |
| HELX | 109 | 55.05% |
| HESN | 73 | 39.73% |
| HEMA | 160 | 78.10% |



ACDM Implementation (CAIRO AIRPORT)



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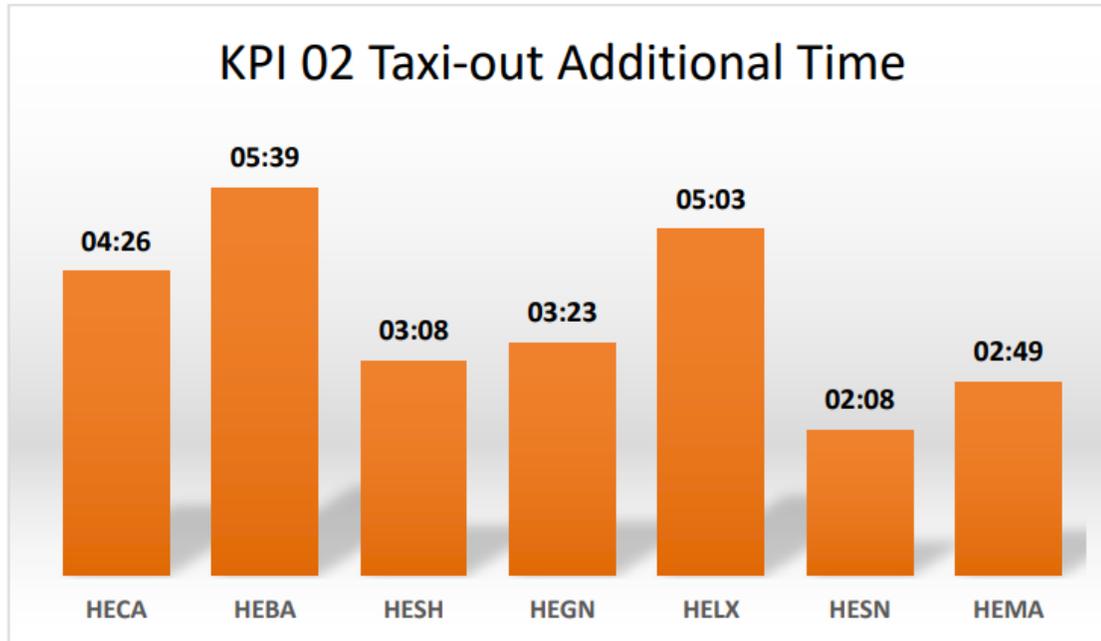


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KPI 02 Taxi-out Additional Time

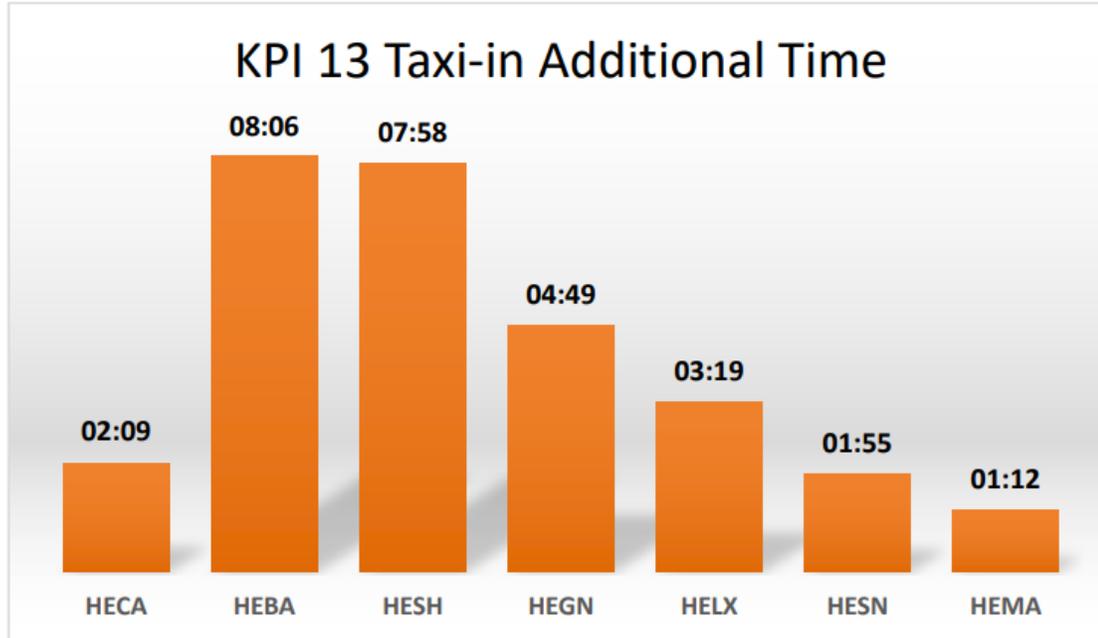


| KPI 02 | Taxi-out Additional Time |
|--------|--------------------------|
| HECA | 04:26 |
| HEBA | 05:39 |
| HESH | 03:08 |
| HEGN | 03:23 |
| HELX | 05:03 |
| HESN | 02:08 |
| HEMA | 02:49 |

ACDM Implementation (CAIRO AIRPORT)



KPI 13 Taxi-in Additional Time

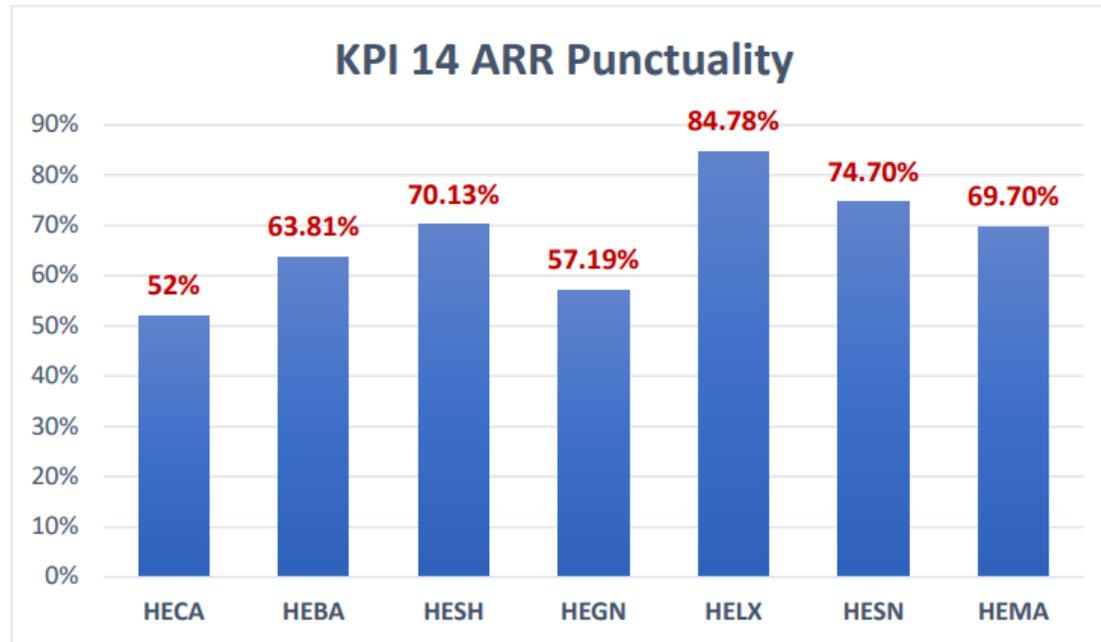


| KPI 13 | Taxi-in Additional Time |
|--------|-------------------------|
| HECA | 02:09 |
| HEBA | 08:06 |
| HESH | 07:58 |
| HEGN | 04:49 |
| HELX | 03:19 |
| HESN | 01:55 |
| HEMA | 01:12 |

ACDM Implementation (CAIRO AIRPORT)



KPI 14 Arrival Punctuality



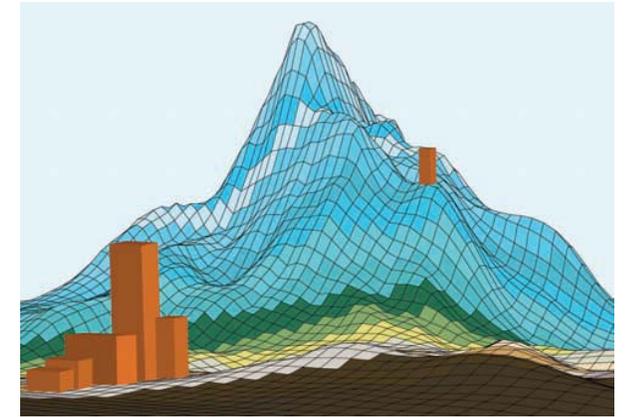
| KPI 14 | Number of scheduled arriving flights | ARR Punctuality |
|--------|--------------------------------------|-----------------|
| HECA | 4794 | 52% |
| HEBA | 630 | 63.81% |
| HESH | 780 | 70.13% |
| HEGN | 1238 | 57.19% |
| HELX | 92 | 84.78% |
| HESN | 83 | 74.70% |
| HEMA | 243 | 69.70% |

ACDM Implementation (CAIRO AIRPORT)

Corrective action to compliance with the requirement of E-TOD and AD mapping

A technical committee was established including all the stakeholders and involved entities and performed the following tasks :

- Evaluating the current implementation status ;
- Putting a realistic road map
- Determining the work techniques & implementation mechanisms



Air Navigation Deficiencies AOP – Area MANDD satisfaction

Implement the provision of required obstacle data sets (E-TOD)



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Current/future aerodromes expansions/projects





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Priorities

- Maintaining operational safety during constructions
- prevent the runway incursion
- Protect OLS; Heavy construction equipment which would infringe Approach and Take-off OLS
- Prevent wildlife attraction
- Implementation of safety measures during construction
- Establish standard vehicle routes to avoid crossing aircraft movement areas
- Provide training for all drivers of vehicles that operate on the aircraft movement area
- Conduct a Risk Identification and Assessment exercise whenever the airport configuration changes

Challenges

- Keep project on schedule during **COVID -19** period
- Construction adjacent to the existing operational runway
- Need to tackle the needs in next phase of development
- Longer time to resolve some infrastructure issues

Current Development Projects:

- HEBA New Terminal (Borgalarb airport)
- HESC New RWY (St. Catherine airport)

Current/future aerodromes expansions/projects (EAC)



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State's Needs on capacity building



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Priorities

- Maintain the 'USOAP CMA Effective Implementation' (EI) score 84.38%
- Certify the secondary aerodrome (on request for international operation)
- Implement the E-TOD Requirement

Challenges

- FULL implement the GRF (training)

State's Needs on capacity building

Thanks for your attention